

002011-22050/60

employed in Example 4 (ISHIHARA SANGYO KAISHA, LTD. KK) to prepare a polyelectrolyte-titanium oxide composite film. The procedure similar to that in Example 11 was performed and the composite film thickness after an immersion time period sufficient for almost saturating the composite film vs the initial polymer film thickness was plotted as shown in Fig. 9. In this figure, a closed triangle represents the polydiallyldimethylammonium chloride (molecular weight: 100,000 to 200,000), a closed square represents the polydiallyldimethylammonium chloride (molecular weight: 400,000 to 500,000) and a closed circle represents C-200H. Fig. 9 reveals that a polyelectrolyte having a smaller molecular weight gave a thicker composite film. Fig. 9 indicates that an intended particle/matrix polymer ratio of the composite film can be obtained by selecting the molecular weight of the polyelectrolyte employed.

(Example 14)

A SUS plate was defatted and its surface was blasted to form an irregular profile, and was used as a substrate to form a polyelectrolyte-polymer-particle composite film on the SUS substrate.

(Example 15)

Using the composite film-attached SUS plate prepared